

Source Reduction

The three keys to source reduction are:

1. REDUCE THE USE – Use less toxic alternatives and safer substitutes whenever possible.
2. SHOP SMART – Always read the label, purchase the least toxic product, and purchase only what you need.
3. THINK "SAFE" – Use proper storage and handling methods. When you have something to dispose of; dispose of it legally and safely.

The following pages contain instructions about reading labels and an extensive list of safer alternatives to household products containing hazardous ingredients. *The information is believed to be sound. But note that the Indiana Department of Environmental Management and the Indiana Institute on Recycling assume no responsibility and disclaim any liability for any injury or damage resulting from the use or effect of any product or information specified in the information provided in this section.*

READING A NON-PESTICIDE LABEL

Following is a list of the information that must be included on the label of a non-pesticide product containing hazardous substances. If the product label does not contain all of the following information, avoid using it. Purchase another product with a complete label.

- (1) **Brand Name**
- (2) **Common and/or Chemical Name** - Common names of hazardous ingredients are listed unless the substance has no common name; then the chemical name is listed.
- (3) **Amount of Contents**
- (4) **Signal Words** - "Danger" (flammable, corrosive, or highly toxic), "Poison" (highly toxic), "Warning" or "Caution"; "nontoxic" is an advertising word, not a regulatory definition.
- (5) **Instructions for Safe Handling and Use** - Always follow product instructions!
- (6) **Name and Address of Manufacturer, Distributor, Packer or Seller** - Contact for additional information regarding product.
- (7) **Description of Hazards and Precautions** - Many products do not indicate what safety equipment should be used when handling the product. It is always better to be safe than sorry. Always be over-cautious when using any household hazardous product.
- (8) **First Aid Instructions** - Antidotes specified may not be in keeping with current medical recommendations. In case of accidental exposure, always contact your local emergency services or Poison Control Center.

SAMPLE NON-PESTICIDE LABEL

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BRIGHT BLEACH

Contains No Phosphates

Active Ingredients: Sodium Hypochloride 5%
64 fl. Oz. (4 Quarts)

CAUTION: Keep Out Of Reach of Children

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BRITE: Household Uses

Use BRITE to clean your bathroom and kitchen. BRITE is an excellent disinfectant and deodorizer. BRITE cleans by removing stubborn stains and eliminating odor-causing germs from surfaces all around the house.

- Toilet bowls - Pour in 1/2 cup of BRITE Brush entire bowl. Let stand 10 minutes- do not use with toilet bowl cleaners. See caution statement.
- Kitchen Sinks -Cover stains with water. Pour 1/2 cup BRITE direct-1); into standing water,
- Floor - Clean with a solution of 1 cup BRITE per gallon of sudsy water. Do not use on cork.
- Bathtubs and Showers - Clean with a solution of 1 cup BRITE per gallon of warm water.

Laundry - Directions for Use:

- Large top loading automatic: 1-1/2 cups *Regular top-loading automatic: 1 cup
- Front -loading automatic: 1/2 cup
- Hand laundry: 2 gallons of sudsy water to 1/4 cup BRITE

Write for a free BRITE "Guide to Cleaner Laundry" booklet or other information on laundry and house cleaning to the BRITE Company, P.O. Box 12345, Braselton, WI 44150

For Use on the Following Fabrics: Cotton, linen, synthetics, permanent press and & colorfast fabrics. Do not use BRITE on silk, wool, mohair, leather, spandex or non -color fast fabrics. CAUTION: BRITE may be harmful if swallowed or may cause severe eye irritation if splashed in eyes. If swallowed, feed milk. If splashed in eyes, flood with water. Call Physician. Skin irritant: If contact with skin, wash off with water. Do not use BRITE with ammonia or products containing acids such as toilet bowl cleaners, rust removers, or vinegar, to do so will release hazardous gases. Prolonged contact with metal may cause pitting or discoloration. Do not use this bottle for storage of any other liquid but BRITE

Following is a list of the information that must be included on the label of a pesticide product containing hazardous substances. If the product label does not contain all of the following information, purchase another product with a complete label.

- (1) Brand Name
- (2) Common Name of Primary Chemical(s)
- (3) Ingredients Statement - Every pesticide label must list what is in the product and percentages of active and inactive ingredients. Names of active ingredients must be shown by chemical name, or common and chemical name. A listing of toxic inert ingredients is not required.
- (4) Type of Formulation - Tells the type of formulation and proper use of the product.
- (5) Child Hazard Warning
- (6) Net Contents
- (7) Directions for Use - Must tell you how to use the product within its legal requirements and for best results.
- (8) Warning or Caution Statements (signal words) - Should indicate what level of exposure requires medical attention and how the product is harmful to humans and pets. If exposure occurs, always contact your local emergency services or Poison Control Center.
- (9) Misuse Statement
- (10) Registration and Establishment Numbers - Every pesticide must be registered with the Environmental Protection Agency (EPA). Labels must contain the registration number and an establishment number (code for the factory)
- (11) Name and Address of Manufacturer –Contact for additional information

SAMPLE PESTICIDE LABEL

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ZAPPO

Tranziapon Insect Spray

Active Ingredients by wt.
Tmnziapon*49%
Petroleum
Derivative Solvent34%
Inert Ingredients17%
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CAUTION:
Keep out of reach of Children

Net Contents 8-fl. oz. Store In a COOL dry place. Read entire label. **Use In accordance with label cautions and directions.** Keep original container. Do **not put concentrate or dilute into food or drink container.**

Makes up to 24 gallons
Diluted spray kills insects:
Aphids. Red Spider Mites.
Flies. Mealy-Bugs and Scales.

Directions: Spray thoroughly on infested plant parts. Repeat as necessary. Household pests (Roaches, Ants, Flies): 2 Tablespoons per gallon of water. Spray on area frequented by insects. Avoid contamination of food, dishes, utensils and waster. Repeat as necessary. Vegetables (Broccoli, Brussel Sprouts, Cabbage. Cauliflower, Kale, Beans, Peas. Potatoes): 1 Tablespoon per gallon water. Do not apply to Broccoli and Peas within 3 days of harvest and to Brusscl Sprouts, Cabbage, Cauliflower or Kale within 7 days of harvest. Do not apply to Beans within 1 day of harvest. Use up to harvest on Potatoes.

CAUTION: Harmful if swallowed. Do not breathe vapor or spray mist. Avoid contact with skin and hands. Wash hands thoroughly after using. Avoid contamination of food. Keep children and animals away from treated areas until the areas are dry. If poisoning occurs, call a physician immediately. Note to Physicians: Emergency Information - call (123) 456-7890. Atropine is antidotal. Do not use, pour, spill or store near heat or open flame. Food utensils such as teaspoons or Tablespoons should not be used for food purposes after use with pesticides. Do not muse container. Dispose of container when empty. This product will kill fish. Keep out of any body of water. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on this label. This product is highly toxic to bees.

NOTICE: Buyer assumes all responsibility for safety and use not in accordance with directions.

Product 1223344 EPA Reg. No. 0000 EPA Est 111-22-3

Chermco Chemical Company, 100 Main Street, Beaverton, MD 54321

SHOPPING LIST OF SAFER ALTERNATIVES

CLEANERS, DEODERIZERS & POLISHES

AIR FRESHENERS & DEODERIZERS

FOR THIS	TRY THIS
Air Fresheners	Leave open boxes of baking soda in refrigerator, closets, and bathrooms.
	Saturate cotton ball with pure vanilla; place on a saucer in refrigerator or car.
	Set out white vinegar in open dishes to destroy odors.
	Open doors and windows. Use a stove fan when cooking.
	Set out potpourri in open dishes.
	Simmer cinnamon and cloves.
	Burn scented candles.
Sink Disposal Odors	Grind used lemons in the disposal.
	Pour baking soda in the disposal.
Surface, Hand & Utensil Odors	Add a few drops of white vinegar to soapy water to remove odors from utensils, chopping blocks or hands.
	Rub hands with the cut end of a celery stalk or a piece of lemon.
Deodorizers	For carpets. Mix 1 part Borax to 2 parts cornmeal; sprinkle liberally on carpet and vacuum up after 1 hour.
	Sprinkle baking soda in the bottom of cat box before adding kitty litter.
	Sprinkle baking soda in the bottom of garbage cans to control odors.

CLEANERS

FOR THIS	TRY THIS
Surface Cleaners	Mix 1 quart warm water, 1-teaspoon mild liquid dishwashing soap, 1 teaspoon borax or TSP. and squeeze of lemon or splash of vinegar.
	Mix 1/2 cup vinegar and 1 quart of warm water.
	Dissolve baking soda in water for general cleaner.

AIR FRESHENERS & DEODERIZERS

FOR THIS	TRY THIS
Coffee Pot Cleaners	Clean coffeepot surfaces with a mixture of warm water and baking soda or vinegar.
	Clean the interior of coffee pots with white vinegar according to manufacturer's directions.
Kitchen Degreasers	Use a non-chlorinated scouring powder with a nylon scouring pad or fine steel wool.
Detergents	Always use mild, biodegradable detergents. Look for naturally derived or glycerine based soaps.
	For washing dishes by hand, use 1/2 cup baking soda with a mild liquid dishwashing liquid to help cut grease and food.
	For automatic dishwashers, choose a detergent with the lowest phosphate content listed on the package.
Disinfectants	Use 1/2 cup borax in 1-gallon hot water. To inhibit mold and mildew, do not rinse off borax mixture.
	Pour 2 cups boiling water over thyme leaves and cover-, let steep for 10 minutes then strain; allow to cool before using.
Drain Openers	Use strainer on every drain and clean out regularly.
	Pour boiling water down the drain once a week to keep it unclogged
	Use a plunger or metal snake to unclog a drain

	Use a plunger followed by a handful of baking soda and 1/2 cup vinegar; cover drain and let set for 15 minutes; rinse with 2 quarts of boiling water.
Floor Cleaners	See Floor Polish/Wax
Glass Cleaners	Combine 1 quart of water with 1/4 to 1/2 cup of white vinegar, 1 to 2 tablespoons of lemon juice or 1 to 2 tablespoons of rubbing alcohol; spray on surfaces and wipe off with soft, lint-free cloth.
Oven Cleaners	Use a non-aerosol oven cleaner that does not contain lye.
	Sprinkle salt on spills when they are warm and then scrub.
	Scrub spots with a baking soda, salt, and water paste.
	Mix 2 tablespoons liquid soap, 2 teaspoons

FOR THIS	TRY THIS
Oven Cleaners	Borax, and 1 quart of warm water; leave on oven for 20 minutes then scrub with fine (0000) steel wool on a non-chlorinated scouring powder.
	Mix 3 tablespoons of washing soda with 1 quart warm water.
	Dip a wet sponge in baking soda to clean glass oven doors.
Mildew Cleaners	Scrub mildew spots with baking soda or borax, or sponge with white vinegar.
	Scrub area with a paste of lemon juice or white vinegar and salt.
	To clean mildew from a shower curtain, machine wash with 1/2 cup soap and 1/2 cup baking soda; add 1 cup white vinegar to rinse cycle.
	To prevent mildew, seal grout after cleaning.
Upholstery, Rug & Carpet Cleaners	Use a non-aerosol, soap-based cleaner.
	Clean spills immediately with club soda.
	Mix 1-quart warm water, 1-teaspoon mild liquid soap, 1-teaspoon borax or TSP product, and squeeze of lemon juice or splash of vinegar apply with a damp cloth or sponge and rub gently; wipe with a clean cloth and allow to dry.
	To clean red wine spills, rub a thick layer of salt on the spill and then sponge up after the spill has been absorbed.
Scouring Powders	Use baking soda or salt.
	Use a non-chlorinated commercial scouring powder.
Toilet bowl Cleaners	Scrub with a solution of 1/2 cup borax in a gallon of water for cleaning and disinfecting.
	Clean frequently with a solution of baking soda and water; sprinkle baking soda around the rim; scrub with toilet brush as needed.
	Use a non-chlorinated scouring powder or baking soda.
Tub/Tile Cleaners	To clean grout, combine 3 cups of baking soda and 1 cup warm water and scrub into the grout; rinse well with water.

LAUNDRY PRODUCTS

FOR THIS	TRY THIS
Chlorine Bleach	Use non-chlorine dry bleach or washing soda to whiten clothes.
	Use 1/2 cup borax per load of laundry to whiten and brighten colors and to remove spots.
	Reduce bleach in half and add 1/4 to 1/2 cup baking soda per load.
Detergent	Use a synthetic detergent without added fabric softeners or bleach.
	Use products that include "washing soda". Washing soda brightens fabrics and costs less than bleach.
Fabric Softener	To freshen and soften clothes, add 1 cup of vinegar or 1/4 cup baking soda during final rinse.
	To reduce "static cling" in synthetics due to tumble drying, dampen hands when folding, or else line dry clothes.
	Use non-perfumed fabric softener sheets rather than liquid fabric softeners.
Presoak	Soak heavily soiled items in warm water with 1/2 cup washing soda for 30 minutes.

	Rub soiled areas with mild liquid soap.
Spot/Stain Remover	See Spot & Stain Removers
Spray Starch	For regular fabrics, dissolve 2 tablespoons cornstarch in 1-pint cold water; store in a spray bottle.
	For delicate fabrics, dissolve 1 packaged unflavored gelatin in 2 cups hot water, store in a spray bottle. To test solution, tip corner of fabric into solution: if it becomes very sticky when dry, add more water.

POLISHES

FOR THIS	TRY THIS
Floor Polish/Wax	To clean vinyl floors, combine 1/4 cup TSP 1/4 cup borax, or 1/2 cup white vinegar with 1 gallon warm water and apply with mop to remove dull greasy film. Polish with club soda.
	To clean wood floors, damp mop with a mild vegetable-base soap; dry at once.
	For painted or finished wood floors, combine 1 teaspoon of washing soda and 1 gallon of hot water wash floors with a rag dampened with mixture; rinse with clear water; dry at once.

FOR THIS	TRY THIS
Floor Polish/Wax	Wood floors sealed with polyurethane can be cleaned with 1/4 cup white vinegar added to 1 gallon water dry at once.
Furniture Polish	Polish unfinished wood with mineral oil.
	To clean and polish finished wood; (1) Use a mild vegetable-base oil soap. (2) Combine 1 part lemon juice with 2 parts vegetable or olive oil and polish with a clean, soft cloth.
	Wash painted wood with 1 teaspoon of washing soda in a gallon of hot water; rinse with clear water.
	To remove water marks, see Spot/Stain Removers.
Metal Polishes	To polish brass: (1) Use Worcestershire sauce or scrub with toothpaste. (2) Pour on toto catsup, let sit and wipe dry. (3) Use water in which onions have been boiled.
	To polish brass and copper, use a lemon juice and salt paste.
	To polish copper, pour white vinegar and salt over copper and rub.
	To polish silver: (1) Soak silver about 5 minutes in 1 quart warm water containing 1 tablespoon baking soda. 1-tablespoon salt and a piece of aluminum foil. (2) Rub with toothpaste or baking soda and a soft cloth, rinse and polish dry.
	To polish chrome: (1) wipe with apple cider vinegar, rinse with water, then dry. (2) shine chrome fixtures with baby oil and a soft cloth, a piece of aluminum foil (shiny side out), or newspapers (wear gloves).
Shoe Polish	Avoid products containing trichloroethylene, methyl chloride, nitrobenzene and mineral spirits.
	For leather shoes: (1) Apply olive oil, walnut oil, or beeswax to shoes then buff with a chamois cloth. (2) Polish black or tan leather shoes with lemon juice then buff with a clean cloth. (3) To clean leather, rub equal parts of white vinegar and, linseed oil into leather; buff with soft cloth.
	To shine and protect patent leather shoes, rub with a dab of petroleum jelly.
	To clean dirt marks from suede, rub with an art-gum eraser then buff lightly with sandpaper or an emery board.

SPOT & STAIN REMOVER

FOR THIS	TRY THIS
Stains on Fabrics	To remove blood stains: (1) Immediately clean stain with club soda or sponge with cold water; dry with towel; repeat if needed. (2) Rub with cornstarch or cornmeal and water paste; let dry in sun; brush off. (3) If stain persists after cleaning with soda or cold water then pour hydrogen peroxide directly on stain; rinse with water, wash as usual OR apply mixture of 1/4 cup borax and 2 cups water; rinse and wash.
	To remove chocolate, soak in cold water, rub with soap and a mild borax solution, rinse, then wash in hottest water the fabric will stand (also can be used on coffee stains).
	To remove coffee stains, soak in cold water, rub with soap and mild borax solution, rinse, then wash in hottest water the fabric can stand (can also be used on chocolate stains).

	To remove fruit stains: soak in cold water 30 minutes; rub soap into remaining stain; wash in hottest water the fabric will stand; bleach with lemon juice and sunlight if needed (also can be used on wine stains).
	To remove grease: (1) Apply paste of cornstarch and water-, let dry then brush off. (2) Cover with baking soda or cornmeal; let dry and brush off. (3) Sponge spot on suede with a cloth dipped in white vinegar, dry, and brush off. (4) Scrub spot with toothpaste.
	To remove ballpoint ink: sponge with rubbing alcohol, rub with soap, rinse and wash. To remove felt-tip ink, rub with soap, rinse and wash. If ink has set on white fabric wet with cold water and apply paste of cream-of-tartar and lemon juice; let sit 1 hour and wash.
	To remove lipstick, rub with cold cream or shortening to dissolve color; rinse area with solution of washing soda and warm water to remove grease; wash in soapy water as hot as fabric will stand.
	To remove oil stains (1) Rub French chalk or white chalk into stain before laundering. (2) Scrub spot with toothpaste.
	To remove perspiration stains, sponge stain with a weak solution of white vinegar, or lemon juice and water.
	To remove rust stains from clothing, moisten spot with lemon juice, sprinkle with salt, and expose to sunlight. To remove rust stains from white fabric, cover the stains with cream of tartar, gather up the ends of the article so that the powder stays on the spot, dip the whole thing into hot water for 5 minutes, then wash as usual.

FOR THIS	TRY THIS
Stains on Fabrics	To remove scorch marks from white linen, cut a raw onion and rub the scorched area with flat side until onion juice is absorbed. Let set; soak in cold water for a few hours.
	To remove tea stains, stretch fabric over a basin and pour boiling water over the stain: wash as usual.
	To remove wine stains: (1) Clean stain immediately with club soda. (2) Immediately pour salt or hot water on stain; soak in milk before washing. (3) To remove wine stains form rug, dab out excess moisture with an absorbent cloth and sprinkle with lots of salt; let sit several hours; then vacuum when dry.
Stains of Metals and Porcelain	To remove stains from porcelain, make a paste using 3 tablespoons borax and 1 tablespoon of lemon juice (or 3 tablespoons of cream of tartar and 1 tablespoon of hydrogen peroxide); scrub with nylon scouring pad and rinse with water.
	To remove coffee/tea stains from china cups, rub with moist salt.
	To remove streaks or heat stains from stainless steel, rub with olive oil, club soda or white vinegar.
	To remove rust spots from car bumpers, briskly rub the area with pieces of crumpled aluminum foil.
Stains on Wood	To remove watermarks from wood furniture, rub toothpaste on spot then polish with a soft cloth.

RECIPES FOR A NON-TOXIC HOME

These recipes are not all scientifically tested and should be used with caution on delicate items.

All Purpose Cleaner

Use either 3-tsp. of liquid soap, 1/4 cup vinegar, or 1/4 cup lemon juice with 1/4 cup Borax per gallon of water.

Use in a spray bottle or bucket and adjust proportions depending on the job.

Borax and soap act as disinfectants.

Brass/Copper Cleaner

Equal parts of vinegar and lemon juice, salt. Add enough salt to make a paste. Apply with soft cloth, rinse and dry. Rub with olive oil to maintain. Ketchup also works.

Mildew Remover & Lime Deposits

1/2 cup white vinegar, 1/2 cup borax, warm water Dissolve borax in water, add vinegar and apply. Make a fresh batch for each use.

Disinfectant

1/4 cup Borax, 1/2 gallon water

Oven Cleaner

Sprinkle salt on spills immediately. Or use baking soda, vinegar Scrub with sponge and baking soda. Vinegar can help cut grease when used alone.

Silver Polish

1 tsp. salt, 1 tsp. baking soda, sheet of aluminum foil.

Put foil in bottom of a pan; add 2 to 3 inches of water, then the baking soda and salt; bring to a boil, add silver pieces making sure water covers the silver, boil 2 to 3 minutes; remove from pan; rinse well and dry. For larger items, run hot water into the kitchen sink; add foil and salt; let item sit for 2 to 3 minutes; rinse well and dry.

Window Cleaner

1/2 cup vinegar, 1 gallon warm water

Drain Cleaner

1/4 cup baking soda. 1/2 cup vinegar Pour baking soda, then vinegar down drain. Close drain until boiling stops. Pour boiling water. Use a plunger or a snake. Take the elbow off the pipe.

Cockroaches and Ants

Powdered sugar, borax. Combine in equal parts and sprinkle in traffic areas, places where they crawl.

From: Citizens for a Better Environment Fact Sheet. State of Wisconsin 1991